

CLAIMS

1. A method for supplying oxygen to a water purification process, said method comprising:
 - 5 a) providing an oxygen carrier of at least one copolymer of dimethylsiloxane, ethylene oxide and propylene oxide;
 - b) adding said oxygen carrier to the water purifying process; and
- 10 c) contacting said oxygen carrier with an oxygen containing gas.
2. A method according to claim 1, wherein said copolymer is added as an emulsion, or as a copolymer immobilized on and/or in a support.
- 15 3. A method according to claim 2, wherein said support immobilized copolymer further includes immobilized microorganisms thereon.
- 20 4. A method according to claim 2 or 3, wherein said support is selected from the group consisting of organic supports and non-organic supports.
5. A method according to any one of claim 1-4, wherein said oxygen containing gas is added to the process either continuously or batch-wise.
- 25 6. A method according to any one of claims 1-5, wherein said copolymer is added to the aerobic steps of the water purifying process.
7. A method according to any one of claims 1-6, wherein said at least one copolymer comprises 10-40 % by weight of dimethylsiloxane, 20-60% by weight of ethylene oxide, and 10-60 % by weight of propylene oxide.
- 30 8. A method according to claim 7, wherein said copolymer comprises 15-35% by weight of dimethylsiloxane, 25-45% by weight of ethylene oxide and 20-50% by weight of propylene oxide.
- 35 9. Use of at least one copolymer of dimethylsiloxane, ethylene oxide and propylene oxide, as an oxygen carrier in a water purification process.

10. Use according to claim 9, wherein said at least one copolymer comprises 10-40 % by weight of dimethylsiloxane, 20-60% by weight of ethylene oxide, and 10-60 % by weight of propylene oxide.

5 11. Use according to claim 10, wherein said copolymer comprises 15-35% by weight of dimethylsiloxane, 25-45% by weight of ethylene oxide and 20-50% by weight of propylene oxide.